

REMARKS

Claims 1-5 are pending in this application. By this Amendment, claims 1 and 2 are amended and claim 6 is canceled without prejudice or disclaimer. Support for these amendments can be found, *inter alia*, in the application as filed at paragraph [0031], [0062] and [0063] of the specification. Reconsideration based on the amendments and following remarks is respectfully requested.

I. The Claims Particularly Point Out and Distinctly Claim the Subject Matter

The Office Action rejects claims 1-6 under 35 U.S.C. §112, second paragraph, as indefinite. Specifically, the Office Action asserts that the recitation in claim 2 "in a[s] heated state" is unclear. Applicants respectfully submit that claim 2 as amended obviates the rejection. Specifically, paragraph [0032] of the specification as filed states that an organic compound is adsorbed onto the raw activated carbon at a heating temperature of, for example, 250°C or more. Thus, heating temperature is defined by the specification. Moreover, it is clear from the face of the claims, and additionally, from a review of the supporting specification, what is being heated.

The Office Action rejects claim 6 because "it is unclear as to what if anything it requires; it appears to merely describe rather than limit." Applicants respectfully submit that cancellation of claim 6 obviates the rejection.

With regard to claim 1, the Office Action asserts that "wide" is subjective and unclear. Applicants respectfully submit that claim 1 as amended obviates the rejection.

The Office Action asserts a rejection as to claims 1-6, but provides the basis for rejection only as to claims 1, 2 and 6. As such, Applicants can only proceed under the assumption that the rejection under §112 is directed to claims 1, 2 and 6. Withdrawal of the rejection is respectfully requested.

II. The Claims Define Allowable Subject Matter

The Office Action rejects claims 1-6 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over JP 06-100309. The Office Action rejects claims 1 and 6 under 35 U.S.C. §102(b) or, in the alternative, 35 U.S.C. §103(a) as being obvious over JP 09-183605. The Office Action rejects claims 1-3 and 6 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over JP 62-132543. The Office Action rejects claims 1-3 and 6 under 35 U.S.C. §102(b) as anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over Moore S.V., et al., "The Preparation of Carbon Molecular Sieves by Pore Blocking." *Carbon*, vol. 15, pp. 177-180 (1977). The Office Action rejects claims 1-6 under 35 U.S.C. §102(b) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over Ohsaki et al. (4,458,022). The Office Action rejects claims 1-3 and 6 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Munzer et al. (3,962,129). The rejections are respectfully traversed.

The Office Action asserts that JP '309 teaches treating an active carbon with a hot hydrogen gas, which is selectively deposited in micropores. However, JP '309 merely discloses a process for producing a carbon. In the process, a carbon material having an average micropore diameter of 5.5 to 12Å is arranged in the treating furnace, which is heated from temperatures of 650 to 850°C, and an inactive gas including aromatic hydrocarbon and/or alicyclic hydrocarbon is supplied, and pyrolytic carbon is deposited on the micropore of the carbon material. JP '309 discloses that the micropore has a diameter of 20Å or less. A molecular sieving carbon having a micropore diameter of 3 to 4Å is produced.

JP '309 aims to provide a molecular sieving carbon which is used for a gas operation technique whereby nitrogen is separated and collected from air. Namely, JP '309 describes that a micropore diameter is reduced.

Contrarily, the presently claimed combination of features relates to a process for producing an activated carbon for canisters which closes pores having a pore diameter of 20\AA or less (wherein remaining pores have a diameter of 20\AA or more). The presently claimed combination of features differ from the JP '309, *inter alia*, in the pore diameter of the produced carbon. Particularly, as for the micro sieving carbon of JP '309, the micropore diameter is small, so gasoline vapor cannot be adsorbed. Accordingly, the activated carbon for canisters cannot easily be achieved by JP '309. As such, JP '309 fails to teach or suggest all the currently claimed combination of features. Withdrawal of the rejection is respectfully requested.

The Office Action asserts that JP '605 discloses pretreating a carbon to block pores, whereby no difference is seen in the carbon or the effect of the treatment. Applicants respectfully submit that JP '605 discloses an activated carbon in which an activated carbon has many pores on the surface thereof, and a low-boiling point hydrocarbon is adsorbed to an inner surface of the pores at least, and a layer of the low-boiling hydrocarbon that covers the inner surface of the pores is formed.

JP '605 fails to teach that pores having a pore diameter or 20\AA or more remain. Moreover, in JP '605, a low molecular weight component is adsorbed to the surface the pores, and the low molecular weight component to which the pores are adsorbed is easily desorbed. Then, a high-boiling point component is adsorbed to the pores to which the low molecular weight component was adsorbed, and the high-boiling point component is desorbed from the pores together with a low molecular weight component. JP '605 aims to prevent the high-boiling point component that is hardly desorbed from being accumulated in the pores, and

JP '605 neither describes nor indicates that the pores having specific diameter are closed. As such, JP '605 fails to teach or suggest all the currently claimed combination of features, much less lead the artisan of ordinary skill in the art to any one of the many advantages of the presently claimed combination of features including producing an activated carbon for canisters which closes pores having a pore diameter of 20Å or less. Most remaining pores have a pore diameter of 20Å or more.

The Office Action asserts that JP '543 discloses contacting carbon with hot organic gas. Applicants respectfully submit that JP '543 discloses an activated carbon on the surface of which phthalocyanine compounds are deposited. Then, it is preferable that an average pore diameter after depositing is 10Å or less.

The activated carbon of JP '543 is an activated carbon for separating a low molecular gas, and JP '543 fails to disclose that the pores having a pore diameter of 20Å or less are closed. Moreover, as above-described, the activated carbon for canisters of the present application is not easily achieved by the activated carbon of JP '543. Accordingly, Applicants respectfully submit that JP '543 fails to teach or suggest all the currently claimed combinations of features. Withdrawal of the rejections is respectfully requested.

The Office Action asserts that Moore discloses contacting carbon with hot organic gas whereby no differences are seen in the carbon or the effect of the treatment. Applicants respectfully submit that Moore discloses that a carbon produced by the pyrolysis of benzene is adsorbed to an activated carbon. Furthermore, Moore discloses that the maximum diameter of pores is 6Å.

The activated carbon of Moore is an activated carbon for separating a low molecular gas, and Moore fails to disclose that the pores having a pore diameter of 20 Å or less are closed. Moreover, as above-described, the activated carbon for canisters of the present application is not easily achieved with any expectation of success by the activated carbon of

Moore. Accordingly, Applicants respectively submit that Moore fails to teach or suggest all the currently claimed combinations of features. Withdrawal of the rejection is respectfully requested.

The Office Action asserts that Ohsaki discloses contracting carbon with hot organic gas. Applicants respectfully submit that Ohsaki discloses that coal tar pitch, coal tar and the like are added to a coconut shell activated carbon that is formed of a pellet shape, and heated to 200-400°C, and then, heated at the temperatures of 950-1,000°C for 10-60 minutes. Ohsaki discloses a molecular sieving carbon to which a molecular gas, e.g., which is oxygen and the like is adsorbed.

The activated carbon of Ohsaki is an activated carbon for separating a low molecular gas, Ohsaki fails to disclose that the pores having a pore diameter of 20Å or less are closed. Moreover, as above-described, the activated carbon for canisters of the present application is not easily achieved by the activated carbon of Ohsaki. Applicants respectfully submit that Ohsaki fails to teach or suggest all the currently claimed combinations of features. Withdrawal of the rejection is respectfully requested.

The Office Action asserts that Munzer discloses contacting carbon with hot organic gas. In fact, Applicants submit that Munzer discloses a molecular sieve containing carbon for separating an oxygen gas or nitrogen gas.

The activated carbon of Munzer is an activated carbon for separating a low molecular gas, and Munzer fails to disclose that the pores having a pore diameter of 20 Å or less are closed. Moreover, as above-described, the activated carbon for canisters of the present application is not easily achieved, with any reasonable expectation of success by the activated carbon of Munzer. Accordingly, Muzner fails to teach or suggest the currently claimed combination of features. Withdrawal of the rejection is respectfully traversed.


The currently claimed combination of features and many advantages disclosed in the present application that are accommodated by the claimed combination of features cannot be achieved by any teaching or suggestion by the applied references, either alone or in combination. As such, withdrawal of the rejections is respectfully requested.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Linda M. Saltiel
Registration No. 51,122

JAO:RAC/eks

Attachment:
Petition for Extension of Time

Date: August 23, 2007

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

**DEPOSIT ACCOUNT USE
AUTHORIZATION**

Please grant any extension
necessary for entry;
Charge any fee due to our
Deposit Account No. 15-0461